

#### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

Examiner:

Tanh Q. Nguyen

Baker et al.

Group Art Unit:

2182

Serial No. 09/777,003

Filed: February 5, 2001

For:

INTEGRATED MULTIMEDIA SYSTEM WITH LOCAL PROCESSOR, DATA TRANSFER SWITCH, PROCESSING MODULES, FIXED FUNCTIONAL

UNIT, DATA STREAMER, INTERFACE UNIT AND MULTIPLEXER, ALL

INTEGRATED ON MULTIMEDIA PROCESSOR

**REPLACEMENT PAGES** 

COPY OF PAPERS ORIGINALLY FILED

Honorable Assistant Commissioner of Patents Washington, DC 20231

Dear Sirs:

Applicants hereby submit these replacement pages accompanying the Amendment filed Herewith in response to the December 26, 2002.

19. An integrated multimedia system having a multimedia processor disposed in an integrated circuit, said system comprising:

a first host processor system coupled to said multimedia processor;

a second local processor disposed within said multimedia processor for controlling the operation of said multimedia processor;

a data transfer switch disposed within said multimedia processor and coupled to said second processor for transferring data to various modules of said multimedia processor;

a data streamer coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor in accordance with corresponding channel allocations;

an interface unit coupled to said data streamer having a plurality of input/output (I/O) device driver units;

a multiplexer coupled to said interface unit for providing access between a selected number of said I/O device driver units to external I/O devices via output pins; and a plurality of external I/O devices coupled to said multimedia processor.

- 20. The system in accordance with claim 19, wherein said external I/O devices are controlled by a corresponding one of said I/O device driver units.
  - 21. The system in accordance with claim 20, wherein one of said external I/O

device is an NTSC decoder.

- 22. The system in accordance with claim 20, wherein one of said external I/O device is an NTSC encoder.
- 23. The system in accordance with claim 20, wherein one of said external I/O device is a demodulator unit configured to demodulate wireless communications signals.
- 24. The system in accordance with claim 23, wherein said demodulator unit communicates with said multimedia processor in accordance with a transport channel interface arrangement.
- 25. The system in accordance with claim 20, wherein said multimedia processor provides video signals and three dimensional graphic signals to an external video display device.
- 26. The system in accordance with claim 20, wherein one of said external I/O device is an ISDN interface.
- 27. The system in accordance with claim 20, wherein one of said external I/O device is an audio coder and decoder (CODEC) unit.

- 28. An integrated multimedia system having a multimedia processor disposed in an integrated circuit, said system comprising:
- a processor disposed within said multimedia processor for controlling the operation of said multimedia processor;

a data transfer switch disposed within said multimedia processor and coupled to said processor for transferring data to various modules of said multimedia processor;

a data streamer coupled to said data transfer switch, and configured to schedule simultaneous data transfers among a plurality of modules disposed within said multimedia processor in accordance with corresponding channel allocations;

an interface unit coupled to said data streamer having a plurality of input/output (I/O) device driver units;

a multiplexer coupled to said interface unit for providing access between a selected number of said I/O device driver units to external I/O devices via output pins; and a plurality of external I/O devices coupled to said multimedia processor.

- 29. The system in accordance with claim 28, wherein said external I/O devices are controlled by a corresponding one of said I/O device driver units.
- 30. The system in accordance with claim 29, wherein one of said external I/O device is an NTSC decoder.

- 31. The system in accordance with claim 29, wherein one of said external I/O device is an NTSC encoder.
- 32. The system in accordance with claim 29, wherein one of said external I/O device is a demodulator unit configured to demodulate wireless communications signals.
- 33. The system in accordance with claim 32, wherein said demodulator unit communicates with said multimedia processor in accordance with a transport channel interface arrangement.
- 34. The system in accordance with claim 29, wherein said multimedia processor provides video signals and three dimensional graphic signals to an external video display device.
- 35. The system in accordance with claim 29, wherein one of said external I/O device is an ISDN interface.
- 36. The system in accordance with claim 29, wherein one of said external I/O device is an audio coder and decoder (CODEC) unit.
  - The system in accordance with claim 19, further comprising a cache

memory directly coupled to said first host processor system, said second local processor and said data transfer switch.